

Utah Weekly Pertussis Update

2017 data, through MMWR week ending September 30, 2017 (MMWR week 39)

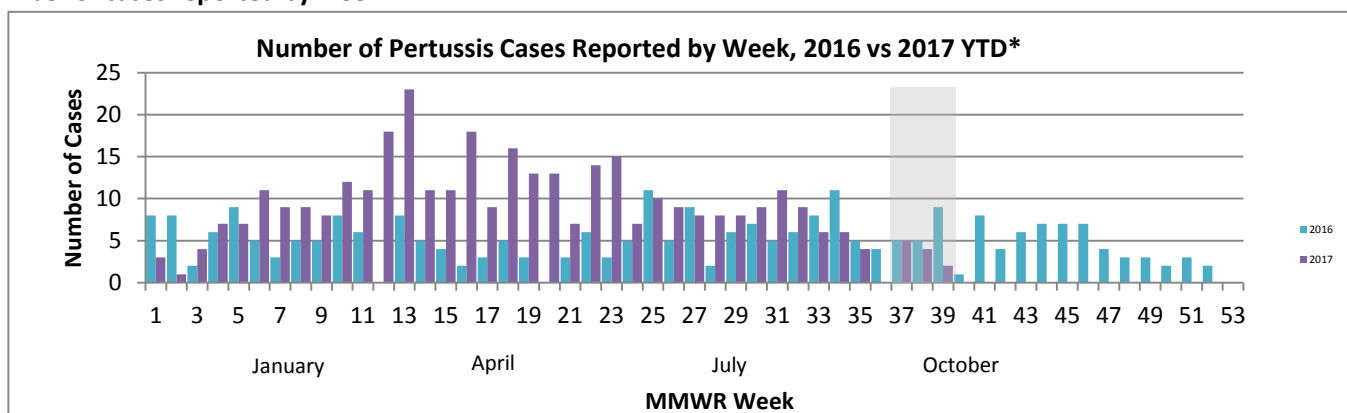
Data presented in this report are based on current data available and will be subject to change weekly.

Data Summary

Total number of cases reported, 2017 year-to-date (YTD)	356	Utah Incidence rate, 2017 year-to-date (YTD) per 100,000 person-years	15.9
Total number of cases reported 2016	267	Utah Incidence rate, 2016 per 100,000 person-years	9.1
Number of cases reported in past week	2	National Incidence rate*, 2015 per 100,000 person-years.	5.7
Total number of cases reported, through same time period 2016	210	2017 Hospitalizations	17
Age groups with the highest rates	<1 1-4	2017 Cases in infants <1 year	26

*National Incidence Rate is updated as released by the Centers for Disease Control and Prevention.

Number of cases reported by week



*Additional cases may have occurred, especially in the most recent 3 weeks that have not yet been reported, as indicated by the grayed out section of the graph above.

2017 Year-to-Date Incidence Rates, By Age

Age (years)	2017 Cases	2015 population	Rate*
<1	26	50,821	68.7
1-4	53	199,882	35.6
5-14	92	516,820	23.9
15-24	78	485,295	21.6
25-34	19	441,518	5.8
35-44	28	399,342	9.4
45-54	18	309,941	7.8
55-64	17	284,433	8.0
65+	20	307,867	8.7
Unknown	5	NA	NA
Total	356	2,995,919	15.9

* Rate is calculated per 100,000 person years.

Infants less than 1 year of age have historically had the highest incidence rates of pertussis due to their susceptibility.

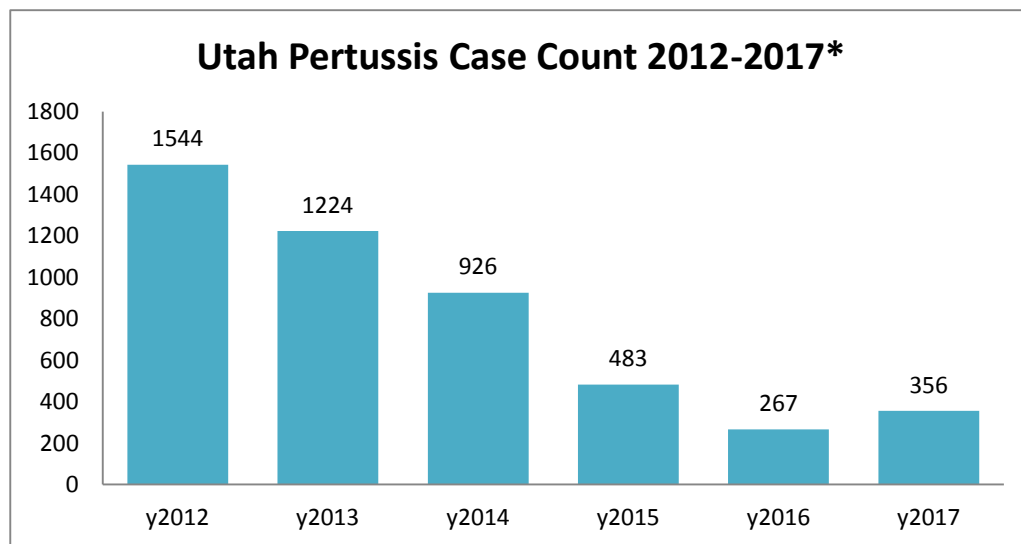
School Age Incidence Rates, 2017 Year-to-Date

Grade	Age (years)	2017 Cases	2015 Population	Rate*
Preschool	3-4	18	99,213	24.3
Kindergarten	5	9	52,218	23.1
1	6	5	52,501	12.8
2	7	8	53,394	20.1
3	8	6	53,225	15.1
4	9	9	52,275	23.1
5	10	6	52,118	15.4
6	11	11	51,405	28.7
7	12	5	50,993	13.2
8	13	11	49,184	30.0
9	14	17	49,507	46.1
10	15	9	49,530	24.4
11	16	15	47,991	41.9
12	17	17	47,452	48.1

* Rate is calculated per 100,000 person-years. School age incidence rates were calculated using the average age of a student in each grade.

High incidence rates in 5th and 6th grade may be due to waning immunity.

Utah Case Counts of Pertussis, 2012-2017* Year to Date



Pertussis tends to be cyclical. Reports have increased in Utah since 2010, peaked in 2012, and are currently trending downward.

* 2017 data includes pertussis cases reported year to date. 2012-2016 data reflects cases reported during the entire calendar year for each year.

Incidence of pertussis by Local Health Department, 2017 YTD

Local Health Department	2017 Cases	Rate*
Bear River	0	0.0
Central Utah	11	19.1
Davis County	28	11.2
Salt Lake County	220	26.7
San Juan County	0	0.0
Southeast Utah	0	0.0
Southwest Utah	2	1.2
Summit County	1	3.4
Tooele County	0	0.0
TriCounty	0	0.0
Utah County	38	8.9
Wasatch County	1	4.6
Weber-Morgan	52	27.4

* Rate is calculated per 100,000 person-years using 2015 Utah population estimates.

